

Metrisches ISO-Gewinde

Grenzmaße für Feingewinde von 53 bis 110 mm Nenndurchmesser
mit gebräuchlichen Toleranzfeldern

DIN

13

Blatt 23

ISO metric fine threads from 53 to 110 mm diameter; limits

Filetages métriques ISO à pas fin du diamètre de 53 à 110 mm;
dimensions limits

Teilweise Ersatz für
DIN 13 Blatt 43 und
DIN 13 Blatt 44

Maße in mm

Die Grenzmaße der Feingewinde mit den gebräuchlichen Toleranzfeldern (siehe DIN 13 Blatt 14) sind aus den Gewinde-Nennmaßen nach DIN 13 Blatt 3 bis Blatt 10 und den Abmaßen und Toleranzen nach DIN 13 Blatt 15 errechnet worden. Grenzmaße für Gewinde nach Toleranzfeldern, die in dieser Norm nicht enthalten sind, können aus den Abmaßen nach DIN 13 Blatt 27 (z. Z. noch Entwurf) errechnet werden.

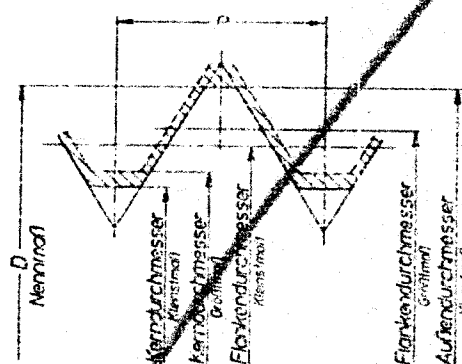


Bild 1. Muttergewinde in Toleranzlage h

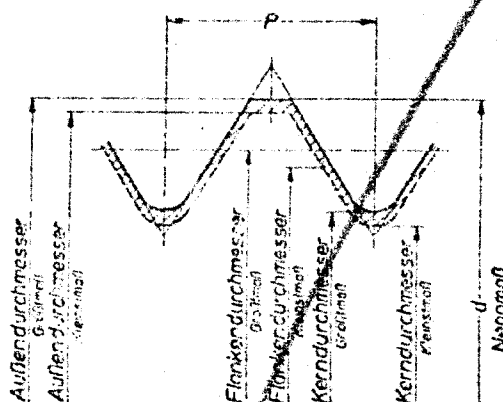


Bild 2. Bolzensgewinde in Toleranzlage h

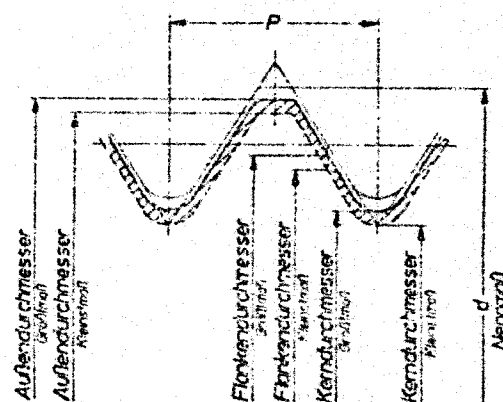


Bild 3. Bolzensgewinde in Toleranzlage g

Fortsetzung Seite 2 bis 11

Ausschuß Gewinde im Deutschen Normenausschuß (DNA)

Gewinde- Nenndurchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser d_2		Kern- durchmesser d_3			
				D_2	D_1	d	d_2			d_3					
											Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß
53	0,5	5H	53,000	52,675	52,787	52,459	52,571	4h	53,000	52,933	52,675	52,608	52,387	52,284	
	0,5	6H	53,000	52,675	52,787	52,459	52,571	6g	52,980	52,874	52,655	52,549	52,367	52,225	
	0,75	5H	53,000	52,513	52,638	52,188	52,338	4h	53,000	52,910	52,513	52,438	52,080	51,951	
	0,75	6H	53,000	52,513	52,673	52,188	52,378	6g	52,978	52,838	52,491	52,373	52,058	51,886	
54	0,5	5H	54,000	53,675	53,787	53,459	53,571	4h	54,000	53,933	53,675	53,608	53,387	53,284	
	0,5	6H	54,000	53,675	53,787	53,459	53,571	6g	53,980	53,874	53,655	53,549	53,367	53,225	
	0,75	5H	54,000	53,513	53,638	53,188	53,338	4h	54,000	53,910	53,513	53,438	53,080	52,951	
	0,75	6H	54,000	53,513	53,673	53,188	53,378	6g	53,978	53,838	53,491	53,373	53,058	52,886	
55	0,5	5H	55,000	54,675	54,787	54,459	54,571	4h	55,000	54,933	54,675	54,608	54,387	54,284	
	0,5	6H	55,000	54,675	54,787	54,459	54,571	6g	54,980	54,874	54,655	54,549	54,367	54,225	
	0,75	5H	55,000	54,513	54,638	54,188	54,338	4h	55,000	54,910	54,513	54,438	54,080	53,951	
	0,75	6H	55,000	54,513	54,673	54,188	54,378	6g	54,978	54,838	54,491	54,373	54,058	53,886	
	1	5H	55,000	54,350	54,500	53,917	54,107	4h	55,000	54,888	54,350	54,260	53,773	53,611	
	1	6H	55,000	54,350	54,530	53,917	54,153	6g	54,974	54,794	54,324	54,184	53,747	53,535	
	1	7H	55,000	54,350	54,580	53,917	54,217	8g	54,974	54,694	54,324	54,100	53,747	53,457	
	1,5	5H	55,000	54,026	54,190	53,376	53,612	4h	55,000	54,850	54,026	53,926	53,160	52,952	
	1,5	6H	55,000	54,026	54,238	53,376	53,678	6g	54,968	54,732	53,994	53,834	53,128	52,860	
	1,5	7H	55,000	54,026	54,291	53,376	53,751	8g	54,968	54,592	53,994	53,744	53,128	52,770	
	2	5H	55,000	53,701	53,891	52,835	53,735	4h	55,000	54,820	53,701	53,589	52,546	52,290	
	2	6H	55,000	53,701	53,937	52,835	53,210	6g	54,962	54,682	53,663	53,483	52,508	52,184	
	2	7H	55,000	53,701	54,001	52,835	53,310	8g	54,962	54,512	53,663	53,383	52,508	52,084	
	3	5H	55,000	53,051	53,275	51,752	52,152	4h	55,000	54,764	53,051	52,919	51,319	50,971	
	3	6H	55,000	53,051	53,331	51,752	52,252	6g	54,952	54,577	53,003	52,791	51,271	50,843	
	3	7H	55,000	53,051	53,405	51,752	52,382	8g	54,952	54,352	53,003	52,568	51,271	50,720	
4	5H	55,000	52,402	52,652	50,670	51,145	4h	55,000	54,700	52,402	52,252	50,093	49,655		
4	6H	55,000	52,402	52,717	50,670	51,270	6g	54,940	54,465	52,342	52,106	50,033	49,509		
4	7H	55,000	52,402	52,802	50,670	51,420	8g	54,940	54,190	52,342	51,967	50,032	49,370		
56	0,5	5H	56,000	55,675	55,787	55,459	55,571	4h	56,000	55,933	55,675	55,608	55,387	55,284	
	0,5	6H	56,000	55,675	55,787	55,459	55,571	6g	55,980	55,874	55,655	55,549	55,367	55,225	
	0,75	5H	56,000	55,513	55,638	55,188	55,338	4h	56,000	55,910	55,513	55,438	55,080	54,951	
	0,75	6H	56,000	55,513	55,673	55,188	55,378	6g	55,978	55,838	55,491	55,373	55,058	54,886	
	1	5H	56,000	55,350	55,500	54,917	55,107	4h	56,000	55,888	55,350	55,260	54,773	54,611	
	1	6H	56,000	55,350	55,530	54,917	55,153	6g	55,974	55,794	55,324	55,184	54,747	54,535	
	1	7H	56,000	55,350	55,586	54,917	55,217	8g	55,974	55,694	55,324	55,100	54,747	54,457	
	1,5	5H	56,000	55,026	55,190	54,276	54,612	4h	56,000	55,850	55,026	54,926	54,160	53,952	
	1,5	6H	56,000	55,026	55,238	54,276	54,676	6g	55,968	55,732	54,994	54,834	54,128	53,860	
	1,5	7H	56,000	55,026	55,291	54,276	54,751	8g	55,968	55,593	54,994	54,744	54,128	53,770	
	2	5H	56,000	54,701	54,891	53,835	54,135	4h	56,000	55,820	54,701	54,589	53,546	53,290	
	2	6H	56,000	54,701	54,937	53,835	54,210	6g	55,962	55,682	54,663	54,483	53,508	53,184	
	2	7H	56,000	54,701	55,001	53,835	54,310	8g	55,962	55,512	54,663	54,383	53,508	53,084	
	3	5H	56,000	54,051	54,275	52,752	53,152	4h	56,000	55,764	54,051	53,919	52,319	51,971	
	3	6H	56,000	54,051	54,331	52,752	53,252	6g	55,952	55,577	54,003	53,791	52,271	51,843	
	3	7H	56,000	54,051	54,406	52,752	53,382	8g	55,952	55,352	54,003	53,668	52,271	51,720	
4	5H	56,000	53,402	53,652	51,670	52,145	4h	56,000	55,700	53,402	53,252	51,093	50,655		
4	6H	56,000	53,402	53,717	51,670	52,270	6g	55,940	55,465	53,342	53,106	51,033	50,509		
4	7H	56,000	53,402	53,802	51,670	52,420	8g	55,940	55,190	53,342	52,967	51,032	50,370		
57	0,5	6H	57,000	56,675	56,787	56,459	56,571	4h	57,000	56,933	56,675	56,608	56,387	56,284	
	0,5	6H	57,000	56,675	56,787	56,459	56,571	6g	56,980	56,874	56,655	56,549	56,367	56,225	
	0,75	5H	57,000	56,513	56,638	56,188	56,338	4h	57,000	56,910	56,513	56,438	56,080	55,951	
	0,75	6H	57,000	56,513	56,673	56,188	56,378	6g	56,978	56,838	56,491	56,373	56,058	55,886	
58	0,5	5H	58,000	57,675	57,787	57,459	57,571	4h	58,000	57,933	57,675	57,608	57,387	57,284	
	0,5	6H	58,000	57,675	57,787	57,459	57,571	6g	57,980	57,874	57,655	57,549	57,367	57,225	
	0,75	5H	58,000	57,513	57,638	57,188	57,338	4h	58,000	57,910	57,513	57,438	57,080	56,951	
	0,75	6H	58,000	57,513	57,673	57,188	57,378	6g	57,978	57,838	57,491	57,373	57,058	56,886	

Gewinde- Nenndurchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser D_2		Kern- durchmesser D_1		Außen- durchmesser d		Flanken- durchmesser d_2		Kern- durchmesser d_3			
				Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß			Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß		
58	1	5H	58,000	57,350	57,500	56,917	57,107	4h	58,000	57,888	57,350	57,260	56,773	56,611	
	1	6H	58,000	57,350	57,530	56,917	57,153	6g	57,974	57,794	57,324	57,184	56,747	56,535	
	1	7H	58,000	57,350	57,586	56,917	57,217	8g	57,974	57,694	57,324	57,100	56,747	56,457	
	1,5	5H	58,000	57,026	57,196	56,376	56,612	4h	58,000	57,850	57,026	56,926	56,160	55,952	
	1,5	6H	58,000	57,026	57,238	56,376	56,676	6g	57,968	57,732	56,994	56,834	56,128	55,860	
	1,5	7H	58,000	57,026	57,291	56,376	56,751	8g	57,968	57,593	56,994	56,744	56,128	55,770	
	2	5H	58,000	56,701	56,891	55,835	56,135	4h	58,000	57,820	56,701	56,589	55,546	55,290	
	2	6H	58,000	56,701	56,937	55,835	56,210	6g	57,962	57,682	56,663	56,483	55,508	55,184	
	2	7H	58,000	56,701	57,001	55,835	56,310	8g	57,962	57,512	56,663	56,383	55,508	55,084	
	3	5H	58,000	56,051	56,275	54,752	55,152	4h	58,000	57,764	56,051	55,919	54,319	53,971	
	3	6H	58,000	56,051	56,331	54,752	55,252	6g	57,952	57,577	56,003	55,791	54,271	53,843	
	3	7H	58,000	56,051	56,406	54,752	55,382	8g	57,952	57,352	56,003	55,668	54,271	53,729	
	4	5H	58,000	55,402	55,652	53,670	54,145	4h	58,000	57,700	55,402	55,252	53,093	52,655	
	4	6H	58,000	55,402	55,717	53,670	54,270	6g	57,940	57,465	55,342	55,106	53,033	52,509	
	4	7H	58,000	55,402	55,802	53,670	54,420	8g	57,940	57,190	55,342	54,967	53,033	52,370	
59	0,5	5H	59,000	58,675	58,787	58,459	58,571	4h	59,000	58,933	58,675	58,608	58,387	58,284	
	0,5	6H	59,000	58,675	58,813	58,459	58,608	6g	58,980	58,874	58,655	58,549	58,367	58,225	
	0,75	5H	59,000	58,513	58,638	58,188	58,338	4h	59,000	58,910	58,513	58,436	58,080	57,951	
	0,75	6H	59,000	58,513	58,673	58,188	58,378	6g	58,978	58,838	58,491	58,373	58,058	57,886	
60	0,5	5H	60,000	59,675	59,787	59,459	59,571	4h	60,000	59,933	59,675	59,608	59,387	59,284	
	0,5	6H	60,000	59,675	59,813	59,459	59,608	6g	59,980	59,874	59,655	59,549	59,367	59,225	
	0,75	5H	60,000	59,513	59,638	59,188	59,338	4h	60,000	59,910	59,513	59,436	59,080	58,951	
	0,75	6H	60,000	59,513	59,673	59,188	59,378	6g	59,978	59,838	59,491	59,373	59,058	58,886	
	1	5H	60,000	59,350	59,500	58,917	59,107	4h	60,000	59,888	59,350	59,260	58,773	58,611	
	1	6H	60,000	59,350	59,530	58,917	59,153	6g	59,974	59,794	59,324	59,184	58,747	58,535	
	1	7H	60,000	59,350	59,586	58,917	59,217	8g	59,974	59,694	59,324	59,100	58,747	58,457	
	1,5	5H	60,000	59,026	59,196	58,376	58,612	4h	60,000	59,850	59,026	58,926	58,160	57,952	
	1,5	6H	60,000	59,026	59,238	58,376	58,676	6g	59,968	59,732	58,994	58,834	58,128	57,860	
	1,5	7H	60,000	59,026	59,291	58,376	58,751	8g	59,968	59,593	58,994	58,744	58,128	57,770	
	2	5H	60,000	58,701	58,891	57,835	58,135	4h	60,000	59,820	58,701	58,589	57,546	57,290	
	2	6H	60,000	58,701	58,937	57,835	58,210	6g	59,962	59,682	58,663	58,483	57,508	57,184	
	2	7H	60,000	58,701	59,001	57,835	58,310	8g	59,962	59,512	58,663	58,383	57,508	57,084	
	3	5H	60,000	58,051	58,275	56,752	57,152	4h	60,000	59,764	58,051	57,919	56,319	55,971	
	3	6H	60,000	58,051	58,331	56,752	57,252	6g	59,952	59,577	58,003	57,791	56,271	55,843	
	3	7H	60,000	58,051	58,406	56,752	57,382	8g	59,952	59,352	58,003	57,668	56,271	55,720	
4	5H	60,000	57,402	57,652	55,670	56,145	4h	60,000	59,700	57,402	57,252	55,093	54,655		
4	6H	60,000	57,402	57,717	55,670	56,270	6g	59,940	59,465	57,342	57,106	55,033	54,509		
4	7H	60,000	57,402	57,802	55,670	56,420	8g	59,940	59,190	57,342	56,967	55,033	54,370		
61	0,5	5H	61,000	60,675	60,787	60,459	60,571	4h	61,000	60,933	60,675	60,608	60,387	60,284	
	0,5	6H	61,000	60,675	60,813	60,459	60,608	6g	60,980	60,874	60,655	60,549	60,367	60,225	
	0,75	5H	61,000	60,513	60,638	60,188	60,338	4h	61,000	60,910	60,513	60,436	60,080	59,951	
	0,75	6H	61,000	60,513	60,673	60,188	60,378	6g	60,978	60,838	60,491	60,373	60,058	59,886	
62	0,5	5H	62,000	61,675	61,787	61,459	61,571	4h	62,000	61,933	61,675	61,608	61,387	61,284	
	0,5	6H	62,000	61,675	61,813	61,459	61,608	6g	61,980	61,874	61,655	61,549	61,367	61,225	
	0,75	5H	62,000	61,513	61,638	61,188	61,338	4h	62,000	61,910	61,513	61,436	61,080	60,951	
	0,75	6H	62,000	61,513	61,673	61,188	61,378	6g	61,978	61,838	61,491	61,373	61,058	60,886	
	1	5H	62,000	61,350	61,500	60,917	61,107	4h	62,000	61,888	61,350	61,260	60,773	60,611	
	1	6H	62,000	61,350	61,530	60,917	61,153	6g	61,974	61,794	61,324	61,184	60,747	60,535	
	1	7H	62,000	61,350	61,586	60,917	61,217	8g	61,974	61,694	61,324	61,100	60,747	60,457	
	1,5	5H	62,000	61,026	61,196	60,376	60,612	4h	62,000	61,850	61,026	60,926	60,160	59,952	
	1,5	6H	62,000	61,026	61,238	60,376	60,676	6g	61,968	61,732	60,994	60,834	60,128	59,860	
	1,5	7H	62,000	61,026	61,291	60,376	60,751	8g	61,968	61,593	60,994	60,744	60,128	59,770	
	2	5H	62,000	60,701	60,891	59,835	60,135	4h	62,000	61,820	60,701	60,589	59,546	59,290	
	2	6H	62,000	60,701	60,937	59,835	60,210	6g	61,962	61,682	60,663	60,483	59,508	59,184	
	2	7H	62,000	60,701	61,001	59,835	60,310	8g	61,962	61,512	60,663	60,383	59,508	59,084	

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Gewinde- Nenndurchmesser $d=D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_1		D_2				d_2		d_3			
				Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß			Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß		
62	3	5H	62,000	60,051	60,275	58,752	59,152	4h	62,000	61,764	60,051	59,919	58,319	57,971	
	3	6H	62,000	60,051	60,331	58,752	59,252	6g	61,952	61,577	60,003	59,791	58,271	57,843	
	3	7H	62,000	60,051	60,406	58,752	59,382	8g	61,952	61,352	60,003	59,668	58,271	57,720	
	4	5H	62,000	59,402	59,652	57,670	58,145	4h	62,000	61,700	59,402	59,252	57,093	56,655	
	4	6H	62,000	59,402	59,717	57,670	58,270	6g	61,940	61,465	59,342	59,106	57,033	56,509	
	4	7H	62,000	59,402	59,802	57,670	58,420	8g	61,940	61,190	59,342	58,967	57,033	56,370	
63	0,5	5H	63,000	62,675	62,787	62,459	62,571	4h	63,000	62,933	62,675	62,608	62,387	62,284	
	0,5	6H	63,000	62,675	62,831	62,459	62,615	6g	62,986	62,874	62,655	62,549	62,367	62,225	
	0,75	5H	63,000	62,513	62,638	62,188	62,338	4h	63,000	62,910	62,513	62,438	62,080	61,951	
	0,75	6H	63,000	62,513	62,673	62,188	62,378	6g	62,978	62,838	62,491	62,373	62,058	61,886	
64	0,5	5H	64,000	63,675	63,787	63,459	63,571	4h	64,000	63,933	63,675	63,608	63,387	63,284	
	0,5	6H	64,000	63,675	63,831	63,459	63,615	6g	63,980	63,874	63,655	63,549	63,367	63,225	
	0,75	5H	64,000	63,513	63,638	63,188	63,338	4h	64,000	63,910	63,513	63,438	63,080	62,951	
	0,75	6H	64,000	63,513	63,673	63,188	63,378	6g	63,978	63,838	63,491	63,373	63,058	62,886	
	1	5H	64,000	63,350	63,500	62,917	63,107	4h	64,000	63,888	63,350	63,260	62,773	62,611	
	1	6H	64,000	63,350	63,530	62,917	63,153	6g	63,974	63,794	63,324	63,184	62,747	62,535	
	1	7H	64,000	63,350	63,586	62,917	63,217	8g	63,974	63,694	63,324	63,100	62,747	62,457	
	1,5	5H	64,000	63,026	63,196	62,376	62,612	4h	64,000	63,850	63,026	62,926	62,160	61,952	
	1,5	6H	64,000	63,026	63,238	62,376	62,676	6g	63,968	63,732	62,994	62,834	62,128	61,860	
	1,5	7H	64,000	63,026	63,291	62,376	62,751	8g	63,968	63,593	62,994	62,744	62,128	61,770	
	2	5H	64,000	62,701	62,891	61,835	62,155	4h	64,000	63,820	62,701	62,589	61,546	61,290	
	2	6H	64,000	62,701	62,937	61,835	62,210	6g	63,962	63,662	62,663	62,483	61,508	61,184	
	2	7H	64,000	62,701	63,001	61,835	62,310	8g	63,962	63,512	62,663	62,383	61,508	61,084	
	3	5H	64,000	62,051	62,275	60,752	61,152	4h	64,000	63,764	62,051	61,919	60,319	59,971	
	3	6H	64,000	62,051	62,331	60,752	61,252	6g	63,952	63,577	62,003	61,791	60,271	59,843	
	3	7H	64,000	62,051	62,406	60,752	61,382	8g	63,952	63,352	62,003	61,668	60,271	59,720	
	4	5H	64,000	61,402	61,652	59,670	60,145	4h	64,000	63,700	61,402	61,252	59,093	58,655	
4	6H	64,000	61,402	61,717	59,670	60,270	6g	63,940	63,465	61,342	61,106	59,033	58,509		
4	7H	64,000	61,402	61,802	59,670	60,420	8g	63,940	63,190	61,342	60,967	59,033	58,370		
65	0,5	5H	65,000	64,675	64,787	64,459	64,571	4h	65,000	64,933	64,675	64,608	64,387	64,284	
	0,5	6H	65,000	64,675	64,831	64,459	64,615	6g	64,980	64,874	64,655	64,549	64,367	64,225	
	0,75	5H	65,000	64,513	64,638	64,188	64,338	4h	65,000	64,910	64,513	64,438	64,080	63,951	
	0,75	6H	65,000	64,513	64,673	64,188	64,378	6g	64,978	64,838	64,491	64,373	64,058	63,886	
	1	5H	65,000	64,350	64,500	63,917	64,107	4h	65,000	64,888	64,350	64,260	63,773	63,611	
	1	6H	65,000	64,350	64,530	63,917	64,153	6g	64,974	64,794	64,324	64,184	63,747	63,535	
	1	7H	65,000	64,350	64,586	63,917	64,217	8g	64,974	64,694	64,324	64,100	63,747	63,457	
	1,5	5H	65,000	64,026	64,196	63,376	64,612	4h	65,000	64,850	64,026	63,926	63,160	62,952	
	1,5	6H	65,000	64,026	64,238	63,376	63,676	6g	64,968	64,732	63,994	63,834	63,128	62,860	
	1,5	7H	65,000	64,026	64,291	63,376	63,751	8g	64,968	64,593	63,994	63,744	63,128	62,770	
	2	5H	65,000	63,701	63,891	62,835	63,155	4h	65,000	64,820	63,701	63,589	62,546	62,290	
	2	6H	65,000	63,701	63,937	62,835	63,210	6g	64,962	64,632	63,663	63,483	62,508	62,184	
	2	7H	65,000	63,701	64,001	62,835	63,310	8g	64,962	64,512	63,663	63,383	62,508	62,084	
	3	5H	65,000	63,051	63,275	61,752	62,152	4h	65,000	64,764	63,051	62,919	61,319	60,971	
	3	6H	65,000	63,051	63,331	61,752	62,252	6g	64,952	64,577	63,003	62,791	61,271	60,843	
	3	7H	65,000	63,051	63,406	61,752	62,382	8g	64,952	64,352	63,003	62,668	61,271	60,720	
	4	5H	65,000	62,402	62,652	60,670	61,145	4h	65,000	64,700	62,402	62,252	60,093	59,655	
	4	6H	65,000	62,402	62,717	60,670	61,270	6g	64,940	64,465	62,342	62,106	60,033	59,509	
	4	7H	65,000	62,402	62,802	60,670	61,420	8g	64,940	64,190	62,342	61,967	60,033	59,370	
66	0,75	5H	66,000	65,513	65,638	65,188	65,338	4h	66,000	65,910	65,513	65,438	65,080	64,951	
	0,75	6H	66,000	65,513	65,673	65,188	65,378	6g	65,978	65,838	65,491	65,373	65,058	64,886	
67	0,75	5H	67,000	66,513	66,638	66,188	66,338	4h	67,000	66,910	66,513	66,438	66,080	65,951	
	0,75	6H	67,000	66,513	66,673	66,188	66,378	6g	66,978	66,838	66,491	66,373	66,058	65,886	
68	0,5	5H	68,000	67,675	67,787	67,459	67,571	4h	68,000	67,933	67,675	67,608	67,387	67,284	
	0,5	6H	68,000	67,675	67,831	67,459	67,615	6g	67,980	67,874	67,655	67,549	67,367	67,225	

Gewinde- Nenn-durchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_2		D_1				d_2		d_3			
				Klein- maß	Größt- maß	Klein- maß	Größt- maß			Klein- maß	Größt- maß	Klein- maß	Größt- maß		
68	0,75	5H	68,000	67,513	67,638	67,188	67,338	4h	68,000	67,910	67,513	67,438	67,080	66,951	
	0,75	6H	68,000	67,513	67,673	67,188	67,378	6g	67,978	67,838	67,491	67,373	67,058	66,886	
	1	5H	68,000	67,350	67,500	66,917	67,107	4h	68,000	67,858	67,350	67,269	66,773	66,611	
	1	6H	68,000	67,350	67,530	66,917	67,153	6g	67,974	67,794	67,324	67,184	66,747	66,535	
	1	7H	68,000	67,350	67,586	66,917	67,217	8g	67,974	67,694	67,324	67,100	66,747	66,457	
	1,5	5H	68,000	67,026	67,196	66,376	66,612	4h	68,000	67,850	67,026	66,926	66,160	65,952	
	1,5	6H	68,000	67,026	67,238	66,376	66,676	6g	67,962	67,732	66,994	66,834	66,128	65,860	
	1,5	7H	68,000	67,026	67,291	66,376	66,751	8g	67,968	67,593	66,994	66,744	66,128	65,770	
	2	5H	68,000	66,701	66,891	65,835	66,135	4h	68,000	67,820	66,701	66,589	65,546	65,290	
	2	6H	68,000	66,701	66,937	65,835	66,210	6g	67,962	67,682	66,663	66,483	65,508	65,184	
	2	7H	68,000	66,701	67,001	65,835	66,310	8g	67,962	67,512	66,663	66,383	65,508	65,084	
	3	5H	68,000	66,051	66,275	64,752	65,152	4h	68,000	67,764	66,051	65,919	64,319	63,971	
	3	6H	68,000	66,051	66,331	64,752	65,252	6g	67,952	67,577	66,003	65,791	64,271	63,843	
	3	7H	68,000	66,051	66,406	64,752	65,352	8g	67,952	67,352	66,003	65,668	64,271	63,720	
	4	5H	68,000	65,402	65,652	63,670	64,145	4h	68,000	67,700	65,402	65,252	63,093	62,655	
	4	6H	68,000	65,402	65,717	63,670	64,270	6g	67,940	67,465	65,342	65,106	63,033	62,509	
	4	7H	68,000	65,402	65,802	63,670	64,420	8g	67,940	67,190	65,342	64,967	63,033	62,370	
69	0,75	5H	69,000	68,513	68,638	68,158	68,338	4h	69,000	68,910	68,513	68,438	68,080	67,951	
	0,75	6H	69,000	68,513	68,673	68,158	68,378	6g	68,978	68,838	68,491	68,373	68,058	67,886	
70	0,5	5H	70,000	69,675	69,787	69,459	69,571	4h	70,000	69,933	69,675	69,608	69,387	69,284	
	0,5	6H	70,000	69,675	69,800	69,459	69,600	6g	69,980	69,874	69,655	69,549	69,367	69,225	
	0,75	5H	70,000	69,513	69,638	69,188	69,338	4h	70,000	69,910	69,513	69,438	69,080	68,951	
	0,75	6H	70,000	69,513	69,673	69,188	69,378	6g	69,978	69,838	69,491	69,373	69,058	68,886	
	1	5H	70,000	69,350	69,500	68,917	69,107	4h	70,000	69,888	69,350	69,269	68,773	68,611	
	1	6H	70,000	69,350	69,530	68,917	69,153	6g	69,974	69,794	69,324	69,184	68,747	68,535	
	1	7H	70,000	69,350	69,586	68,917	69,217	8g	69,974	69,694	69,324	69,100	68,747	68,457	
	1,5	5H	70,000	69,026	69,196	68,376	68,612	4h	70,000	69,850	69,026	68,926	68,160	67,952	
	1,5	6H	70,000	69,026	69,238	68,376	68,676	6g	69,968	69,732	68,994	68,834	68,128	67,860	
	1,5	7H	70,000	69,026	69,291	68,376	68,751	8g	69,968	69,593	68,994	68,744	68,128	67,770	
	2	5H	70,000	68,701	68,891	67,835	68,135	4h	70,000	69,820	68,701	68,589	67,546	67,290	
	2	6H	70,000	68,701	68,937	67,835	68,210	6g	69,962	69,682	68,663	68,483	67,508	67,184	
	2	7H	70,000	68,701	69,001	67,835	68,310	8g	69,962	69,512	68,663	68,383	67,508	67,084	
	3	5H	70,000	68,051	68,275	66,752	67,152	4h	70,000	69,764	68,051	67,919	66,319	65,971	
	3	6H	70,000	68,051	68,331	66,752	67,252	6g	69,952	69,577	68,003	67,791	66,271	65,843	
	3	7H	70,000	68,051	68,406	66,752	67,382	8g	69,952	69,352	68,003	67,668	66,271	65,720	
	4	5H	70,000	67,402	67,652	65,670	66,145	4h	70,000	69,700	67,402	67,252	65,093	64,655	
	4	6H	70,000	67,402	67,717	65,670	66,270	6g	69,940	69,465	67,342	67,106	65,033	64,509	
	4	7H	70,000	67,402	67,802	65,670	66,420	8g	69,940	69,190	67,342	66,967	65,033	64,370	
	6	5H	70,000	66,103	66,403	63,505	64,135	4h	70,000	69,625	66,103	65,923	62,639	62,027	
	6	6H	70,000	66,103	66,478	63,505	64,205	6g	69,920	69,320	66,023	65,743	62,559	61,847	
	6	7H	70,000	66,103	66,578	63,505	64,505	8g	69,920	69,270	66,023	65,573	62,559	61,677	
72	0,5	5H	72,000	71,675	71,787	71,459	71,571	4h	72,000	71,933	71,675	71,608	71,387	71,284	
	0,5	6H	72,000	71,675	71,800	71,459	71,600	6g	71,980	71,874	71,655	71,549	71,367	71,225	
	0,75	5H	72,000	71,513	71,638	71,188	71,338	4h	72,000	71,910	71,513	71,438	71,080	70,951	
	0,75	6H	72,000	71,513	71,673	71,188	71,378	6g	71,978	71,838	71,491	71,373	71,058	70,886	
	1	5H	72,000	71,350	71,500	70,917	71,107	4h	72,000	71,888	71,350	71,269	70,773	70,611	
	1	6H	72,000	71,350	71,530	70,917	71,153	6g	71,974	71,794	71,324	71,184	70,747	70,535	
	1	7H	72,000	71,350	71,586	70,917	71,217	8g	71,974	71,694	71,324	71,100	70,747	70,457	
	1,5	5H	72,000	71,026	71,196	70,376	70,612	4h	72,000	71,850	71,026	70,926	70,160	69,952	
	1,5	6H	72,000	71,026	71,238	70,376	70,676	6g	71,968	71,732	70,994	70,834	70,128	69,860	
	1,5	7H	72,000	71,026	71,291	70,376	70,751	8g	71,968	71,593	70,994	70,744	70,128	69,770	
	2	5H	72,000	70,701	70,891	69,835	70,135	4h	72,000	71,820	70,701	70,589	69,546	69,290	
	2	6H	72,000	70,701	70,937	69,835	70,210	6g	71,962	71,682	70,663	70,483	69,508	69,184	
	2	7H	72,000	70,701	71,001	69,835	70,310	8g	71,962	71,512	70,663	70,383	69,508	69,084	
	3	5H	72,000	70,051	70,275	68,752	69,152	4h	72,000	71,764	70,051	69,919	68,319	67,971	
	3	6H	72,000	70,051	70,331	68,752	69,252	6g	71,952	71,577	70,003	69,791	68,271	67,843	
	3	7H	72,000	70,051	70,406	68,752	69,382	8g	71,952	71,352	70,003	69,668	68,271	67,720	

Gewinde- Nenndurchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_2		D_1				d_2		d_3			
				Klein- maß	Größt- maß	Klein- maß	Größt- maß			Größt- maß	Klein- maß	Größt- maß	Klein- maß		
72	4	5H	72,000	69,402	69,652	67,670	68,145	4h	72,000	71,700	69,402	69,252	67,093	66,655	
	4	6H	72,000	69,402	69,717	67,670	68,270	6g	71,940	71,495	69,342	69,106	67,033	66,509	
	4	7H	72,000	69,402	69,802	67,670	68,420	8g	71,940	71,390	69,342	68,967	67,033	66,370	
	6	5H	72,000	68,103	68,403	65,505	66,135	4h	72,000	71,625	68,103	67,923	64,639	64,027	
	6	6H	72,000	68,103	68,478	65,505	66,305	6g	71,920	71,320	68,023	67,743	64,559	63,847	
	6	7H	72,000	68,103	68,578	65,505	66,505	8g	71,920	70,970	68,023	67,573	64,559	63,677	
75	0,5	5H	75,000	74,675	74,787	74,459	74,571	4h	75,000	74,933	74,675	74,608	74,387	74,284	
	0,5	6H	75,000	74,675	74,874	74,459	74,980	6g	74,980	74,874	74,655	74,549	74,367	74,225	
	0,75	5H	75,000	74,513	74,638	74,188	74,338	4h	75,000	74,910	74,513	74,438	74,080	73,951	
	0,75	6H	75,000	74,513	74,673	74,188	74,378	6g	74,978	74,838	74,491	74,373	74,058	73,886	
	1	5H	75,000	74,350	74,500	73,917	74,107	4h	75,000	74,888	74,350	74,260	73,773	73,611	
	1	6H	75,000	74,350	74,530	73,917	74,153	6g	74,974	74,794	74,324	74,145	73,747	73,535	
	1	7H	75,000	74,350	74,586	73,917	74,217	8g	74,974	74,694	74,324	74,100	73,747	73,457	
	1,5	5H	75,000	74,026	74,196	73,376	73,612	4h	75,000	74,850	74,026	73,926	73,160	72,952	
	1,5	6H	75,000	74,026	74,238	73,376	73,676	6g	74,968	74,732	73,994	73,834	73,128	72,860	
	1,5	7H	75,000	74,026	74,291	73,376	73,751	8g	74,968	74,593	73,994	73,744	73,128	72,770	
	2	5H	75,000	73,701	73,891	72,835	73,135	4h	75,000	74,820	73,701	73,589	72,546	72,290	
	2	6H	75,000	73,701	73,937	72,835	73,210	6g	74,962	74,582	73,663	73,483	72,508	72,184	
	2	7H	75,000	73,701	74,001	72,835	73,311	8g	74,962	74,512	73,663	73,383	72,508	72,084	
	3	5H	75,000	73,051	73,275	71,752	72,152	4h	75,000	74,764	73,051	72,919	71,319	70,971	
	3	6H	75,000	73,051	73,331	71,752	72,252	6g	74,952	74,577	73,003	72,791	71,271	70,843	
	3	7H	75,000	73,051	73,406	71,752	72,382	8g	74,952	74,352	73,003	72,668	71,271	70,720	
	4	5H	75,000	72,402	72,652	70,670	71,145	4h	75,000	74,700	72,402	72,252	70,093	69,655	
	4	6H	75,000	72,402	72,717	70,670	71,270	6g	74,940	74,465	72,342	72,106	70,033	69,509	
	4	7H	75,000	72,402	72,802	70,670	71,420	8g	74,940	74,190	72,342	71,967	70,033	69,370	
	76	0,75	5H	76,000	75,513	75,638	75,188	75,338	4h	76,000	75,910	75,513	75,438	75,080	74,951
0,75		6H	76,000	75,513	75,673	75,188	75,378	6g	75,978	75,838	75,491	75,373	75,058	74,886	
1		5H	76,000	75,350	75,500	74,917	75,107	4h	76,000	75,888	75,350	75,260	74,773	74,611	
1		6H	76,000	75,350	75,530	74,917	75,153	6g	75,974	75,794	75,324	75,184	74,747	74,535	
1		7H	76,000	75,350	75,586	74,917	75,217	8g	75,974	75,694	75,324	75,100	74,747	74,457	
1,5		5H	76,000	75,026	75,196	74,376	74,612	4h	76,000	75,850	75,026	74,926	74,160	73,952	
1,5		6H	76,000	75,026	75,238	74,376	74,676	6g	75,968	75,732	74,994	74,834	74,128	73,860	
1,5		7H	76,000	75,026	75,291	74,376	74,751	8g	75,968	75,593	74,994	74,744	74,128	73,770	
2		5H	76,000	74,701	74,891	73,835	74,135	4h	76,000	75,820	74,701	74,589	73,546	73,290	
2		6H	76,000	74,701	74,937	73,835	74,210	6g	75,962	75,582	74,663	74,483	73,508	73,184	
2		7H	76,000	74,701	75,001	73,835	74,310	8g	75,962	75,512	74,663	74,383	73,508	73,084	
3		5H	76,000	74,051	74,275	72,752	73,152	4h	76,000	75,764	74,051	73,919	72,319	71,971	
3		6H	76,000	74,051	74,331	72,752	73,252	6g	75,952	75,577	74,003	73,791	72,271	71,843	
3		7H	76,000	74,051	74,406	72,752	73,382	8g	75,952	75,352	74,003	73,668	72,271	71,720	
4		5H	76,000	73,402	73,652	71,670	72,145	4h	76,000	75,700	73,402	73,252	71,093	70,655	
4		6H	76,000	73,402	73,717	71,670	72,270	6g	75,940	75,465	73,342	73,106	71,033	70,509	
4		7H	76,000	73,402	73,802	71,670	72,420	8g	75,940	75,190	73,342	72,967	71,033	70,370	
6		5H	76,000	72,103	72,403	69,505	70,135	4h	76,000	76,625	72,103	71,923	68,639	68,027	
6		6H	76,000	72,103	72,478	69,505	70,305	6g	75,920	75,320	72,023	71,743	68,559	67,847	
6		7H	76,000	72,103	72,578	69,505	70,505	8g	75,920	74,970	72,023	71,573	68,559	67,677	
78	0,5	5H	78,000	77,675	77,787	77,459	77,571	4h	78,000	77,933	77,675	77,608	77,387	77,284	
	0,5	6H	78,000	77,675	77,874	77,459	77,980	6g	77,980	77,874	77,655	77,549	77,367	77,225	
	0,75	5H	78,000	77,513	77,638	77,188	77,338	4h	78,000	77,910	77,513	77,438	77,080	76,951	
	0,75	6H	78,000	77,513	77,673	77,188	77,378	6g	77,978	77,838	77,491	77,373	77,058	76,886	
	1	5H	78,000	77,350	77,500	76,917	77,107	4h	78,000	77,888	77,350	77,260	76,773	76,611	
	1	6H	78,000	77,350	77,530	76,917	77,153	6g	77,974	77,794	77,324	77,184	76,747	76,535	
	1	7H	78,000	77,350	77,586	76,917	77,217	8g	77,974	77,694	77,324	77,100	76,747	76,457	
	1,5	5H	78,000	77,026	77,196	76,376	76,612	4h	78,000	77,850	77,026	76,926	76,160	75,952	
	1,5	6H	78,000	77,026	77,238	76,376	76,676	6g	77,968	77,732	76,994	76,834	76,128	75,860	
	1,5	7H	78,000	77,026	77,291	76,376	76,751	8g	77,968	77,593	76,994	76,744	76,128	75,770	

74,484

Gewinde- Nenndurchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_2		D_1				d_2		d_3			
				Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß			Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß		
78	2	5H	78,000	76,701	76,891	75,835	76,135	4h	78,000	77,820	76,701	76,589	75,546	75,290	
	2	6H	78,000	76,701	76,937	75,835	76,210	6g	77,962	77,682	76,633	76,483	75,508	75,184	
	2	7H	78,000	76,701	77,001	75,835	76,310	8g	77,962	77,512	76,663	76,383	75,508	75,084	
	3	5H	78,000	76,051	76,275	74,752	75,152	4h	78,000	77,764	76,051	75,919	74,319	73,971	
	3	6H	78,000	76,051	76,331	74,752	75,252	6g	77,952	77,577	76,003	75,791	74,271	73,843	
	3	7H	78,000	76,051	76,406	74,752	75,382	8g	77,952	77,352	76,003	75,668	74,271	73,720	
	4	5H	78,000	75,402	75,652	73,670	74,145	4h	78,000	77,700	75,402	75,252	73,093	72,655	
	4	6H	78,000	75,402	75,717	73,670	74,270	6g	77,940	77,465	75,342	75,106	73,033	72,509	
	4	7H	78,000	75,402	75,802	73,670	74,420	8g	77,940	77,190	75,342	74,967	73,033	72,370	
80	0,5	5H	80,000	79,675	79,787	79,459	79,571	4h	80,000	79,933	79,675	79,608	79,387	79,284	
	0,5	6g						6g	79,980	79,874	79,655	79,549	79,367	79,225	
	0,75	5H	80,000	79,513	79,638	79,188	79,338	4h	80,000	79,910	79,513	79,438	79,080	78,951	
	0,75	6H	80,000	79,513	79,673	79,188	79,378	6g	79,978	79,838	79,491	79,373	79,058	78,886	
	1	5H	80,000	79,350	79,500	78,917	79,107	4h	80,000	79,888	79,350	79,260	78,773	78,611	
	1	6H	80,000	79,350	79,530	78,917	79,155	6g	79,974	79,794	79,324	79,184	78,747	78,535	
	1	7H	80,000	79,350	79,586	78,917	79,217	8g	79,974	79,694	79,324	79,100	78,747	78,457	
	1,5	5H	80,000	79,026	79,196	78,376	78,612	4h	80,000	79,850	79,026	78,926	78,160	77,952	
	1,5	6H	80,000	79,026	79,238	78,376	78,676	6g	79,968	79,732	78,994	78,834	78,128	77,860	
	1,5	7H	80,000	79,026	79,291	78,376	78,751	8g	79,968	79,593	78,994	78,744	78,128	77,770	
	2	5H	80,000	78,701	78,891	77,835	78,135	4h	80,000	79,820	78,701	78,589	77,546	77,290	
	2	6H	80,000	78,701	78,937	77,835	78,210	6g	79,962	79,682	78,663	78,483	77,508	77,184	
	2	7H	80,000	78,701	79,001	77,835	78,310	8g	79,962	79,512	78,663	78,383	77,508	77,084	
	3	5H	80,000	78,051	78,275	76,752	77,152	4h	80,000	79,764	78,051	77,919	76,319	75,971	
	3	6H	80,000	78,051	78,331	76,752	77,252	6g	79,952	79,577	78,003	77,791	76,271	75,843	
	3	7H	80,000	78,051	78,406	76,752	77,382	8g	79,952	79,352	78,003	77,668	76,271	75,720	
	4	5H	80,000	77,402	77,652	75,670	76,145	4h	80,000	79,700	77,402	77,252	75,093	74,655	
	4	6H	80,000	77,402	77,717	75,670	76,270	6g	79,940	79,465	77,342	77,106	75,033	74,509	
	4	7H	80,000	77,402	77,802	75,670	76,420	8g	79,940	79,190	77,342	76,967	75,033	74,370	
	6	5H	80,000	76,103	76,403	73,505	74,135	4h	80,000	79,625	76,103	75,923	72,639	72,027	
	6	6H	80,000	76,103	76,478	73,505	74,305	6g	79,920	79,320	76,023	75,743	72,559	71,847	
	6	7H	80,000	76,103	76,578	73,505	74,505	8g	79,920	78,970	76,023	75,573	72,559	71,677	
82	0,5	5H	82,000	81,675	81,787	81,459	81,571	4h	82,000	81,933	81,675	81,603	81,387	81,284	
	0,5	6g						6g	81,980	81,874	81,655	81,549	81,367	81,225	
	0,75	5H	82,000	81,513	81,638	81,188	81,338	4h	82,000	81,910	81,513	81,438	81,080	80,951	
	0,75	6H	82,000	81,513	81,673	81,188	81,378	6g	81,978	81,838	81,491	81,373	81,058	80,886	
	1	5H	82,000	81,350	81,500	80,917	81,107	4h	82,000	81,868	81,350	81,260	80,773	80,611	
	1	6H	82,000	81,350	81,530	80,917	81,155	6g	81,974	81,794	81,324	81,184	80,747	80,535	
	1	7H	82,000	81,350	81,586	80,917	81,217	8g	81,974	81,694	81,324	81,100	80,747	80,457	
	1,5	5H	82,000	81,026	81,196	80,376	80,612	4h	82,000	81,850	81,026	80,926	80,160	79,952	
	1,5	6H	82,000	81,026	81,238	80,376	80,676	6g	81,968	81,732	80,994	80,834	80,128	79,860	
	1,5	7H	82,000	81,026	81,291	80,376	80,751	8g	81,968	81,593	80,994	80,744	80,128	79,770	
	2	5H	82,000	80,701	80,891	79,835	80,135	4h	82,000	81,820	80,701	80,589	79,546	79,290	
	2	6H	82,000	80,701	80,937	79,835	80,210	6g	81,962	81,682	80,663	80,483	79,508	79,184	
	2	7H	82,000	80,701	81,001	79,835	80,310	8g	81,962	81,512	80,663	80,383	79,508	79,084	
	3	5H	82,000	80,051	80,275	78,752	79,152	4h	82,000	81,764	80,051	79,919	78,319	77,971	
	3	6H	82,000	80,051	80,331	78,752	79,252	6g	81,952	81,577	80,003	79,791	78,271	77,843	
	3	7H	82,000	80,051	80,406	78,752	79,382	8g	81,952	81,352	80,003	79,668	78,271	77,720	
	4	5H	82,000	79,402	79,652	77,670	78,145	4h	82,000	81,700	79,402	79,252	77,093	76,655	
	4	6H	82,000	79,402	79,717	77,670	78,270	6g	81,940	81,465	79,342	79,106	77,033	76,509	
	4	7H	82,000	79,402	79,802	77,670	78,420	8g	81,940	81,190	79,342	78,967	77,033	76,370	
85	0,5	5H	85,000	84,675	84,787	84,459	84,571	4h	85,000	84,933	84,675	84,608	84,387	84,284	
	0,5	6g						6g	84,980	84,874	84,655	84,549	84,367	84,225	
	0,75	5H	85,000	84,513	84,638	84,188	84,338	4h	85,000	84,910	84,513	84,438	84,080	83,951	
	0,75	6H	85,000	84,513	84,673	84,188	84,378	6g	84,978	84,838	84,491	84,373	84,058	83,886	
	1	5H	85,000	84,350	84,500	83,917	84,107	4h	85,000	84,888	84,350	84,260	83,773	83,611	
	1	6H	85,000	84,350	84,530	83,917	84,153	6g	84,974	84,794	84,324	84,184	83,747	83,535	
	1	7H	85,000	84,350	84,586	83,917	84,217	8g	84,974	84,694	84,324	84,100	83,747	83,457	

Gewinde- Nenndurchmesser $d=D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_2	Größt- maß	D_1	Größt- maß			d_2	Größt- maß	d_3	Größt- maß	Klein- maß	
85	1,5	5H	85,000	84,026	84,196	83,376	83,612	4h	85,000	84,850	84,026	83,926	83,160	82,952	
	1,5	6H	85,000	84,026	84,238	83,376	83,676	6g	84,968	84,732	83,994	83,834	83,128	82,860	
	1,5	7H	85,000	84,026	84,291	83,376	83,751	8g	84,968	84,593	83,994	83,744	83,128	82,770	
	2	5H	85,000	83,701	83,891	82,835	83,135	4h	85,000	84,820	83,701	83,589	82,546	82,290	
	2	6H	85,000	83,701	83,937	82,835	83,210	6g	84,968	84,682	83,663	83,483	82,508	82,184	
	2	7H	85,000	83,701	84,001	82,835	83,310	8g	84,968	84,512	83,663	83,383	82,508	82,084	
	3	5H	85,000	83,051	83,275	81,752	82,152	4h	85,000	84,764	83,051	82,919	81,319	80,971	
	3	6H	85,000	83,051	83,331	81,752	82,252	6g	84,952	84,577	83,003	82,791	81,271	80,843	
	3	7H	85,000	83,051	83,406	81,752	82,382	8g	84,952	84,352	83,003	82,668	81,271	80,720	
	4	5H	85,000	82,402	82,652	80,670	81,145	4h	85,000	84,700	82,402	82,252	80,093	79,655	
	4	6H	85,000	82,402	82,717	80,670	81,270	6g	84,940	84,465	82,342	82,106	80,033	79,509	
	4	7H	85,000	82,402	82,802	80,670	81,420	8g	84,940	84,190	82,342	81,967	80,033	79,370	
	6	5H	85,000	81,103	81,403	78,505	79,135	4h	85,000	84,625	81,103	80,923	77,639	77,027	
	6	6H	85,000	81,103	81,478	78,505	79,305	6g	84,920	84,320	81,023	80,743	77,559	76,847	
	6	7H	85,000	81,103	81,578	78,505	79,505	8g	84,920	83,970	81,023	80,573	77,559	76,677	
88	0,5	5H	88,000	87,675	87,787	87,459	87,571	4h	88,000	87,933	87,675	87,608	87,387	87,284	
	0,5	6H	88,000	87,675	87,838	87,459	87,638	6g	87,980	87,874	87,655	87,549	87,367	87,225	
	0,75	5H	88,000	87,513	87,638	87,198	87,338	4h	88,000	87,910	87,513	87,438	87,080	86,951	
	0,75	6H	88,000	87,513	87,673	87,198	87,378	6g	87,978	87,838	87,491	87,373	87,058	86,886	
	1	5H	88,000	87,350	87,500	86,917	87,107	4h	88,000	87,888	87,350	87,260	86,773	86,611	
	1	6H	88,000	87,350	87,530	86,917	87,153	6g	87,974	87,794	87,324	87,184	86,747	86,535	
	1	7H	88,000	87,350	87,586	86,917	87,217	8g	87,974	87,694	87,324	87,100	86,747	86,457	
	1,5	5H	88,000	87,026	87,196	86,376	86,612	4h	88,000	87,850	87,026	86,926	86,160	85,952	
	1,5	6H	88,000	87,026	87,238	86,376	86,676	6g	87,968	87,732	86,994	86,834	86,128	85,860	
	1,5	7H	88,000	87,026	87,291	86,376	86,751	8g	87,968	87,593	86,994	86,744	86,128	85,770	
	2	5H	88,000	86,701	86,891	85,835	86,135	4h	88,000	87,820	86,701	86,589	85,546	85,290	
	2	6H	88,000	86,701	86,937	85,835	86,210	6g	87,962	87,682	86,663	86,483	85,508	85,184	
	2	7H	88,000	86,701	87,001	85,835	86,310	8g	87,962	87,512	86,663	86,383	85,508	85,084	
	3	5H	88,000	86,051	86,275	84,752	85,152	4h	88,000	87,764	86,051	85,919	84,319	83,971	
	3	6H	88,000	86,051	86,331	84,752	85,252	6g	87,952	87,577	86,003	85,791	84,271	83,843	
	3	7H	88,000	86,051	86,406	84,752	85,382	8g	87,952	87,352	86,003	85,668	84,271	83,720	
	4	5H	88,000	85,402	85,652	83,670	84,145	4h	88,000	87,700	85,402	85,252	83,093	82,655	
	4	6H	88,000	85,402	85,717	83,670	84,270	6g	87,940	87,465	85,342	85,106	83,033	82,509	
	4	7H	88,000	85,402	85,802	83,670	84,420	8g	87,940	87,190	85,342	84,967	83,033	82,370	
90	0,5	5H	90,000	89,675	89,787	89,459	89,571	4h	90,000	89,933	89,675	89,608	89,387	89,284	
	0,5	6H	90,000	89,675	89,838	89,459	89,638	6g	89,980	89,874	89,655	89,549	89,367	89,225	
	0,75	5H	90,000	89,513	89,638	89,198	89,338	4h	90,000	89,910	89,513	89,438	89,080	88,951	
	0,75	6H	90,000	89,513	89,673	89,198	89,378	6g	89,978	89,838	89,491	89,373	89,058	88,886	
	1	5H	90,000	89,350	89,500	88,917	89,107	4h	90,000	89,888	89,350	89,260	88,773	88,611	
	1	6H	90,000	89,350	89,530	88,917	89,153	6g	89,974	89,794	89,324	89,184	88,747	88,535	
	1	7H	90,000	89,350	89,586	88,917	89,217	8g	89,974	89,694	89,324	89,100	88,747	88,457	
	1,5	5H	90,000	89,026	89,196	88,376	88,612	4h	90,000	89,850	89,026	88,926	88,160	87,952	
	1,5	6H	90,000	89,026	89,238	88,376	88,676	6g	89,968	89,732	88,994	88,834	88,128	87,860	
	1,5	7H	90,000	89,026	89,291	88,376	88,751	8g	89,968	89,593	88,994	88,744	88,128	87,770	
	2	5H	90,000	88,701	88,891	87,835	88,135	4h	90,000	89,820	88,701	88,589	87,546	87,290	
	2	6H	90,000	88,701	88,937	87,835	88,210	6g	89,962	89,682	88,663	88,483	87,508	87,184	
	2	7H	90,000	88,701	89,001	87,835	88,310	8g	89,962	89,512	88,663	88,383	87,508	87,084	
	3	5H	90,000	88,051	88,275	86,752	87,152	4h	90,000	89,764	88,051	87,919	86,319	85,971	
	3	6H	90,000	88,051	88,331	86,752	87,252	6g	89,952	89,577	88,003	87,791	86,271	85,843	
	3	7H	90,000	88,051	88,406	86,752	87,382	8g	89,952	89,352	88,003	87,668	86,271	85,720	
	4	5H	90,000	87,402	87,652	85,670	86,145	4h	90,000	89,700	87,402	87,252	85,093	84,655	
	4	6H	90,000	87,402	87,717	85,670	86,270	6g	89,940	89,465	87,342	87,106	85,033	84,509	
	4	7H	90,000	87,402	87,802	85,670	86,420	8g	89,940	89,190	87,342	86,967	85,033	84,370	
	6	5H	90,000	86,103	86,403	83,505	84,135	4h	90,000	89,625	86,103	85,923	82,639	82,027	
	6	6H	90,000	86,103	86,478	83,505	84,305	6g	89,920	89,320	86,023	85,743	82,559	81,947	
	6	7H	90,000	86,103	86,578	83,505	84,505	8g	89,920	88,970	86,023	85,573	82,559	81,677	

Gewinde- Nenndurchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser D_2		Kern- durchmesser D_1		Außen- durchmesser d		Flanken- durchmesser d_2		Kern- durchmesser d_3			
				Klein- maß	Größt- maß	Klein- maß	Größt- maß			Größt- maß	Klein- maß	Größt- maß	Klein- maß		
92	0,75	5H	92,000	91,513	91,653	91,188	91,338	4h	92,000	91,910	91,513	91,428	91,080	90,941	
	0,75	6H	92,000	91,513	91,693	91,188	91,378	6g	91,978	91,838	91,491	91,359	91,058	90,872	
	1	5H	92,000	91,350	91,510	90,917	91,107	4h	92,000	91,888	91,350	91,255	90,773	90,606	
	1	6H	92,000	91,350	91,550	90,917	91,153	6g	91,974	91,794	91,324	91,174	90,747	90,525	
	1	7H	92,000	91,350	91,600	90,917	91,217								
	1,5	5H	92,000	91,026	91,206	90,376	90,612	4h	92,000	91,850	91,026	90,920	90,160	89,946	
	1,5	6H	92,000	91,026	91,250	90,376	90,676	6g	91,968	91,732	90,994	90,824	90,128	89,850	
	1,5	7H	92,000	91,026	91,306	90,376	90,751								
	2	5H	92,000	90,701	90,901	89,835	90,135	4h	92,000	91,820	90,701	90,583	89,546	89,284	
	2	6H	92,000	90,701	90,951	89,835	90,210	6g	91,962	91,682	90,663	90,473	89,508	89,174	
	2	7H	92,000	90,701	91,016	89,835	90,310	8g	91,962	91,512	90,663	90,363	89,508	89,064	
	3	5H	92,000	90,051	90,287	88,752	89,152	4h	92,000	91,764	90,051	89,911	88,319	87,963	
	3	6H	92,000	90,051	90,351	88,752	89,252	6g	91,952	91,577	90,003	89,779	88,271	87,831	
	3	7H	92,000	90,051	90,423	88,752	89,382	8g	91,952	91,352	90,003	89,648	88,271	87,700	
	4	5H	92,000	89,402	89,667	87,670	88,145	4h	92,000	91,700	89,402	89,242	87,093	86,645	
	4	6H	92,000	89,402	89,737	87,670	88,270	6g	91,940	91,465	89,342	89,092	87,033	86,495	
	4	7H	92,000	89,402	89,827	87,670	88,420	8g	91,940	91,190	89,342	88,942	87,033	86,345	
95	0,75	5H	95,000	94,513	94,653	94,188	94,338	4h	95,000	94,910	94,513	94,428	94,080	93,941	
	0,75	6H	95,000	94,513	94,693	94,188	94,378	6g	94,978	94,838	94,491	94,359	94,058	93,872	
	1	5H	95,000	94,350	94,510	93,917	94,107	4h	95,000	94,888	94,350	94,255	93,773	93,606	
	1	6H	95,000	94,350	94,550	93,917	94,153	6g	94,974	94,794	94,324	94,174	93,747	93,525	
	1	7H	95,000	94,350	94,600	93,917	94,217								
	1,5	5H	95,000	94,026	94,206	93,376	93,612	4h	95,000	94,850	94,026	93,920	93,160	92,946	
	1,5	6H	95,000	94,026	94,250	93,376	93,676	6g	94,968	94,732	93,994	93,824	93,128	92,850	
	1,5	7H	95,000	94,026	94,306	93,376	93,751								
	2	5H	95,000	93,701	93,901	92,835	93,135	4h	95,000	94,820	93,701	93,583	92,546	92,284	
	2	6H	95,000	93,701	93,951	92,835	93,210	6g	94,962	94,682	93,663	93,473	92,508	92,174	
	2	7H	95,000	93,701	94,016	92,835	93,310	8g	94,962	94,512	93,663	93,363	92,508	92,064	
	3	5H	95,000	93,051	93,287	91,752	92,152	4h	95,000	94,764	93,051	92,911	91,319	90,963	
	3	6H	95,000	93,051	93,351	91,752	92,252	6g	94,952	94,577	93,003	92,779	91,271	90,831	
	3	7H	95,000	93,051	93,426	91,752	92,382	8g	94,952	94,352	93,003	92,648	91,271	90,700	
	4	5H	95,000	92,402	92,667	90,670	91,145	4h	95,000	94,700	92,402	92,242	90,093	89,645	
	4	6H	95,000	92,402	92,737	90,670	91,270	6g	94,940	94,465	92,342	92,092	90,033	89,495	
	4	7H	95,000	92,402	92,827	90,670	91,420	8g	94,940	94,190	92,342	91,942	90,033	89,345	
	6	5H	95,000	91,103	91,418	88,505	89,135	4h	95,000	94,625	91,103	90,913	87,659	87,017	
	6	6H	95,000	91,103	91,503	88,505	89,305	6g	94,920	94,320	91,023	90,723	87,559	86,827	
	6	7H	95,000	91,103	91,603	88,505	89,505	8g	94,920	93,970	91,023	90,548	87,559	86,652	
98	0,75	5H	98,000	97,513	97,653	97,188	97,338	4h	98,000	97,910	97,513	97,428	97,080	96,941	
	0,75	6H	98,000	97,513	97,693	97,188	97,378	6g	97,978	97,838	97,491	97,359	97,058	96,872	
	1	5H	98,000	97,350	97,510	96,917	97,107	4h	98,000	97,888	97,350	97,255	96,773	96,606	
	1	6H	98,000	97,350	97,550	96,917	97,153	6g	97,974	97,794	97,324	97,174	96,747	96,525	
	1	7H	98,000	97,350	97,600	96,917	97,217								
	1,5	5H	98,000	97,026	97,206	96,376	96,612	4h	98,000	97,850	97,026	96,920	96,160	95,946	
	1,5	6H	98,000	97,026	97,250	96,376	96,676	6g	97,968	97,732	96,994	96,824	96,128	95,850	
	1,5	7H	98,000	97,026	97,306	96,376	96,751								
	2	5H	98,000	96,701	96,901	95,835	96,135	4h	98,000	97,820	96,701	96,583	95,546	95,284	
	2	6H	98,000	96,701	96,951	95,835	96,210	6g	97,962	97,682	96,663	96,473	95,508	95,174	
	2	7H	98,000	96,701	97,016	95,835	96,310	8g	97,962	97,512	96,663	96,363	95,508	95,064	
	3	5H	98,000	96,051	96,287	94,752	95,152	4h	98,000	97,764	96,051	95,911	94,319	93,963	
	3	6H	98,000	96,051	96,351	94,752	95,252	6g	97,952	97,577	96,003	95,779	94,271	93,831	
	3	7H	98,000	96,051	96,426	94,752	95,382	8g	97,952	97,352	96,003	95,648	94,271	93,700	
	4	5H	98,000	95,402	95,667	93,670	94,145	4h	98,000	97,700	95,402	95,242	93,093	92,645	
	4	6H	98,000	95,402	95,737	93,670	94,270	6g	97,940	97,465	95,342	95,092	93,033	92,495	
	4	7H	98,000	95,402	95,827	93,670	94,420	8g	97,940	97,190	95,342	94,942	93,033	92,345	

Gewinde- Nenn-durchmesser $d = D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Außen- durchmesser d		Flanken- durchmesser		Kern- durchmesser			
				D_2		D_1				d_2		d_3			
				Klein- maß	Größt- maß	Klein- maß	Größt- maß			Klein- maß	Größt- maß	Klein- maß	Größt- maß		
100	0,75	5H	100,000	99,513	99,653	99,188	99,338	4h	100,000	99,910	99,513	99,428	99,080	98,941	
	0,75	6H	100,000	99,513	99,693	99,188	99,378	6g	99,978	99,838	99,491	99,359	99,058	98,872	
	1	5H	100,000	99,350	99,510	98,917	99,107	4h	100,000	99,888	99,350	99,255	98,773	98,606	
	1	6H	100,000	99,350	99,550	98,917	99,153	6g	99,974	99,794	99,324	99,174	98,747	98,525	
	1	7H	100,000	99,350	99,600	98,917	99,217								
	1,5	5H	100,000	99,026	99,206	98,376	98,612	4h	100,000	99,850	99,026	98,920	98,160	97,946	
	1,5	6H	100,000	99,026	99,250	98,376	98,676	6g	99,963	99,732	98,994	98,824	98,128	97,850	
	1,5	7H	100,000	99,026	99,306	98,376	98,751								
	2	5H	100,000	98,701	98,901	97,835	98,135	4h	100,000	99,820	98,701	98,583	97,546	97,284	
	2	6H	100,000	98,701	98,951	97,835	98,210	6g	99,962	99,682	98,663	98,472	97,508	97,174	
	2	7H	100,000	98,701	99,016	97,835	98,310	8g	99,962	99,512	98,663	98,363	97,508	97,064	
	3	5H	100,000	98,051	98,287	96,752	97,152	4h	100,000	99,764	98,051	97,911	96,319	95,963	
	3	6H	100,000	98,051	98,351	96,752	97,252	6g	99,952	99,577	98,003	97,779	96,271	95,831	
	3	7H	100,000	98,051	98,426	96,752	97,382	8g	99,952	99,352	98,003	97,648	96,271	95,700	
	4	5H	100,000	97,402	97,667	95,670	96,142	4h	100,000	99,700	97,402	97,242	95,093	94,646	
	4	6H	100,000	97,402	97,737	95,670	96,270	6g	99,940	99,465	97,342	97,092	95,033	94,495	
	4	7H	100,000	97,402	97,824	95,670	96,420	8g	99,940	99,190	97,342	96,942	95,033	94,345	
	6	5H	100,000	96,103	96,418	93,505	94,335	4h	100,000	99,625	96,103	95,913	92,639	92,017	
6	6H	100,000	96,103	96,503	93,505	94,305	6g	99,920	99,320	96,023	95,723	92,559	91,827		
6	7H	100,000	96,103	96,603	93,505	94,505	8g	99,920	98,970	96,023	95,548	92,559	91,652		
102	0,75	5H	102,000	101,513	101,653	101,188	101,338	4h	102,000	101,910	101,513	101,428	101,080	100,941	
	0,75	6H	102,000	101,513	101,693	101,188	101,378	6g	101,978	101,838	101,491	101,359	101,058	100,872	
	1	5H	102,000	101,350	101,510	100,917	101,107	4h	102,000	101,888	101,350	101,255	100,773	100,606	
	1	6H	102,000	101,350	101,550	100,917	101,153	6g	101,974	101,794	101,324	101,174	100,747	100,525	
	1	7H	102,000	101,350	101,600	100,917	101,217								
	1,5	5H	102,000	101,026	101,206	100,376	100,612	4h	102,000	101,850	101,026	100,920	100,160	99,946	
	1,5	6H	102,000	101,026	101,250	100,376	100,676	6g	101,968	101,732	100,994	100,824	100,128	99,850	
	1,5	7H	102,000	101,026	101,306	100,376	100,751								
	2	5H	102,000	100,701	100,901	99,835	100,135	4h	102,000	101,820	100,701	100,583	99,546	99,284	
	2	6H	102,000	100,701	100,951	99,835	100,210	6g	101,962	101,682	100,663	100,473	99,508	99,174	
	2	7H	102,000	100,701	101,016	99,835	100,310	8g	101,962	101,512	100,663	100,363	99,508	99,064	
	3	5H	102,000	100,051	100,287	98,752	99,152	4h	102,000	101,764	100,051	99,911	98,319	97,963	
	3	6H	102,000	100,051	100,351	98,752	99,252	6g	101,952	101,577	100,003	99,779	98,271	97,831	
	3	7H	102,000	100,051	100,426	98,752	99,382	8g	101,952	101,352	100,003	99,648	98,271	97,700	
	4	5H	102,000	99,402	99,667	98,670	98,145	4h	102,000	101,700	99,402	99,242	97,093	96,645	
	4	6H	102,000	99,402	99,737	98,670	98,270	6g	101,940	101,465	99,342	99,092	97,033	96,495	
	4	7H	102,000	99,402	99,827	98,670	98,420	8g	101,940	101,190	99,342	98,942	97,033	96,345	
	105	0,75	5H	105,000	104,513	104,653	104,188	104,338	4h	105,000	104,910	104,513	104,428	104,080	103,941
0,75		6H	105,000	104,513	104,693	104,188	104,378	6g	104,978	104,838	104,491	104,359	104,058	103,872	
1		5H	105,000	104,350	104,510	103,917	104,107	4h	105,000	104,888	104,350	104,255	103,773	103,606	
1		6H	105,000	104,350	104,550	103,917	104,153	6g	104,974	104,794	104,324	104,174	103,747	103,525	
1		7H	105,000	104,350	104,600	103,917	104,217								
1,5		5H	105,000	104,026	104,206	103,376	103,612	4h	105,000	104,850	104,026	103,920	103,160	102,946	
1,5		6H	105,000	104,026	104,250	103,376	103,676	6g	104,968	104,732	103,994	103,824	103,128	102,850	
1,5		7H	105,000	104,026	104,306	103,376	103,751								
2		5H	105,000	103,701	103,901	102,835	103,135	4h	105,000	104,820	103,701	103,583	102,546	102,284	
2		6H	105,000	103,701	103,951	102,835	103,210	6g	104,962	104,682	103,663	103,473	102,508	102,174	
2		7H	105,000	103,701	104,016	102,835	103,310	8g	104,962	104,512	103,663	103,363	102,508	102,064	
3		5H	105,000	103,051	103,287	101,752	102,152	4h	105,000	104,764	103,051	102,911	101,319	100,963	
3		6H	105,000	103,051	103,351	101,752	102,252	6g	104,952	104,577	103,003	102,779	101,271	100,831	
3		7H	105,000	103,051	103,426	101,752	102,382	8g	104,952	104,352	103,003	102,648	101,271	100,700	
4		5H	105,000	102,402	102,667	100,670	101,145	4h	105,000	104,700	102,402	102,242	100,093	99,645	
4		6H	105,000	102,402	102,737	100,670	101,270	6g	104,940	104,465	102,342	102,092	100,033	99,495	
4		7H	105,000	102,402	102,827	100,670	101,420	8g	104,940	104,190	102,342	101,942	100,033	99,345	
6		5H	105,000	101,103	101,418	98,505	99,135	4h	105,000	104,625	101,103	100,913	99,639	97,017	
6	6H	105,000	101,103	101,503	98,505	99,305	6g	104,920	104,320	101,023	100,723	97,559	96,827		
6	7H	105,000	101,103	101,603	98,505	99,505	8g	104,920	103,970	101,023	100,548	97,559	96,652		

Gewinde- Nenndurchmesser $d=D$	Steigung P	Toleranzfeld	Muttergewinde						Toleranzfeld	Bolzensgewinde					
			Außen- durch- messer D	Flanken- durchmesser D_2		Kern- durchmesser D_1		Außen- durchmesser d		Flanken- durchmesser d_2		Kern- durchmesser d_3			
				Klein- maß	Größt- maß	Klein- maß	Größt- maß			Größt- maß	Klein- maß	Größt- maß	Klein- maß		
108	0,75	5H	108,000	107,513	107,653	107,188	107,338	4h	108,000	107,910	107,513	107,428	107,080	106,941	
	0,75	6H	108,000	107,513	107,693	107,188	107,378	6g	107,978	107,838	107,491	107,359	107,058	106,872	
	1	5H	108,000	107,350	107,510	106,917	107,107	4h	108,000	107,888	107,350	107,255	106,773	106,606	
	1	6H	108,000	107,350	107,550	106,917	107,153	6g	107,974	107,794	107,324	107,174	106,747	106,525	
	1	7H	108,000	107,350	107,600	106,917	107,217								
	1,5	5H	108,000	107,026	107,206	106,376	106,612	4h	108,000	107,850	107,026	106,920	106,160	105,946	
	1,5	6H	108,000	107,026	107,250	106,376	106,676	6g	107,968	107,732	106,994	106,824	106,128	105,850	
	1,5	7H	108,000	107,026	107,306	106,376	106,751								
	2	5H	108,000	106,701	106,801	105,835	106,135	4h	108,000	107,820	106,701	106,583	105,546	105,284	
	2	6H	108,000	106,701	106,851	105,835	106,210	6g	107,962	107,682	106,663	106,473	105,508	105,174	
	2	7H	108,000	106,701	107,016	105,835	106,310	8g	107,962	107,512	106,663	106,263	105,508	105,064	
	3	5H	108,000	106,051	106,287	104,752	105,152	4h	108,000	107,764	106,051	105,911	104,319	103,963	
	3	6H	108,000	106,051	106,351	104,752	105,252	6g	107,952	107,577	106,003	105,779	104,271	103,831	
	3	7H	108,000	106,051	106,426	104,752	105,382	8g	107,952	107,352	106,003	105,648	104,271	103,700	
	4	5H	108,000	105,402	105,667	103,670	104,115	4h	108,000	107,700	105,402	105,242	103,093	102,645	
	4	6H	108,000	105,402	105,737	103,670	104,270	6g	107,940	107,465	105,342	105,092	103,033	102,495	
	4	7H	108,000	105,402	105,827	103,670	104,420	8g	107,940	107,190	105,342	104,942	103,033	102,345	
110	0,75	5H	110,000	109,513	109,653	109,188	109,338	4h	110,000	109,910	109,513	109,428	109,080	108,841	
	0,75	6H	110,000	109,513	109,693	109,188	109,378	6g	109,978	109,838	109,491	109,359	109,058	108,872	
	1	5H	110,000	109,350	109,510	108,917	109,107	4h	110,000	109,888	109,350	109,255	108,773	108,606	
	1	6H	110,000	109,350	109,517	108,917	109,153	6g	109,974	109,794	109,324	109,174	108,747	108,525	
	1	7H	110,000	109,350	109,600	108,917	109,217								
	1,5	5H	110,000	109,026	109,206	108,376	108,612	4h	110,000	109,850	109,026	108,920	108,160	107,946	
	1,5	6H	110,000	109,026	109,250	108,376	108,676	6g	109,968	109,732	108,994	108,824	108,128	107,850	
	1,5	7H	110,000	109,026	109,306	108,376	108,751								
	2	5H	110,000	108,701	108,801	107,835	108,135	4h	110,000	109,820	108,701	108,583	107,546	107,284	
	2	6H	110,000	108,701	108,851	107,835	108,210	6g	109,962	109,682	108,663	108,473	107,508	107,174	
	2	7H	110,000	108,701	109,016	107,835	108,310	8g	109,962	109,512	108,663	108,263	107,508	107,064	
	3	5H	110,000	108,051	108,287	106,752	107,152	4h	110,000	109,764	108,051	107,911	106,319	105,963	
	3	6H	110,000	108,051	108,351	106,752	107,252	6g	109,952	109,577	108,003	107,779	106,271	105,831	
	3	7H	110,000	108,051	108,426	106,752	107,382	8g	109,952	109,352	108,003	107,648	106,271	105,700	
	4	5H	110,000	107,402	107,667	105,670	106,115	4h	110,000	109,700	107,402	107,242	105,092	104,645	
	4	6H	110,000	107,402	107,737	105,670	106,270	6g	109,940	109,465	107,342	107,092	105,033	104,495	
	4	7H	110,000	107,402	107,827	105,670	106,420	8g	109,940	109,190	107,342	106,942	105,033	104,345	
	6	5H	110,000	106,103	106,418	103,505	104,135	4h	110,000	109,025	106,103	105,913	102,639	102,017	
	6	6H	110,000	106,103	106,503	103,505	104,305	6g	109,920	109,320	106,023	105,723	102,559	101,827	
	6	7H	110,000	106,103	106,603	103,505	104,503	8g	109,920	109,070	106,023	105,548	102,559	101,652	